## **Receiving Report**

	ate: <u> 4 9 5</u> upplier: <u> B &amp; A </u>	_ Re		Batch No: Dart P/O:	M/.	3020 25384	F/
Packing Slip: Invoice: Receipt: New Supplier Discrepancies	YesNo Yes No Cash Cr Yes No		Waybill At	Complete: pection	Yes	No No 	
Part Number	Description	Quantity Ordered	Quantity Rec'd	Quantity Short	Quantity Inspected	Quantity Rejected	Comment / NCR Number
-				Initials of	Receiver	QC12	
Production/Ad	min:					A.	1 (in)

H:\FORMS\Purchasing\approved purch\RECREPORT Rev F



Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 Tel: 613 632 9577

Fax: 613 632 1053

#### **PURCHASE ORDER**

#### Purchase Order ID PO25584

Purchase Order Date 9/2/2014 PO Print Date 9/2/2014

Page Number 1 of 2

Order From:

B/E AEROSPACE INC 88289 EXPEDITE WAY CHICAGO, IL 33172 USA VU-BEA001

Ship To: DART AEROSPACE LTD

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

**CANADA** 



**Contact Name** 

**Vendor Phone** 

**Ship To Contact** 

**Ship To Phone** 

305-925-2600

FedEx Overnight collect

Buyer

Chantal Lavoie

Customer POID
Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

Ship Via: Ship Acct:

S	hip Acct:					M130 28	7
Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ CD Taxable Promise Date	Req Qty/ Unit of Measure		PO Unit Price	Extended Price
1	NAS1329C3KB130	Insert	9/4/2014 Yes	50.00 Each		\$1.23	\$61.50
			9/4/2014				
						Line Total:	\$61.50
2	MS24694-S50	Screw	9/4/2014	200.00	V	\$0.08	\$16.00
2	93		Yes 9/4/2014	Each			·
					,	Line Total:	\$16.00
3	M\$35207-262	Screw	9/4/2014	50.00		\$0.30	\$15.00
20	92		Yes 9/4/2014	Each		'ok	

Note:



Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 Tel: 613 632 9577

Fax: 613 632 1053

#### **PURCHASE ORDER**

#### Purchase Order ID PO25584

Purchase Order Date 9/2/2014 PO Print Date 9/2/2014

Page Number 2 of 2

Order From:

**B/E AEROSPACE INC** 88289 EXPEDITE WAY CHICAGO, IL 33172

**USA** 

VU-BEA001

Ship To: DART AEROSPACE LTD

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

**CANADA** 

**Contact Name** 

**Vendor Phone** 

305-925-2600

Buyer

Chantal Lavoie

**Ship To Contact** 

**Ship To Phone** 

Ship Via: Ship Acct: FedEx Overnight collect

**Customer POID** Customer Tax #

10127-2607

**Terms** 

Net 30

Currency

USD

**FOB** 

FCA - (Free Carrier)

Line Total:

\$15.00

MS21075L3

Nut Plate

9/4/2014 FN

100.00

\$40.00

Yes

9/4/2014

Each

Line Total:

\$40.00

71401-45

PROCUREMENT QUALITY CLAUSES 9/4/2014

9/4/2014

No

1.00

\$0.00

\$0.00

Procurement Quality Clauses

A005 RIGHT OF ENTRY A026 CERTIFICATION OF MATERIAL CONFORMANCE A032 PUBLIC LAW 101-592 FASTENER QUALITY ACT A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS A040 NOTIFICATION OF QUALITY ESCAPE A041 QUALITY MANAGEMENT SYSTEM A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

Line Total:

\$0.00

PO Total:

\$132.50

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explaination.

Change Nbr:

1

9/2/2014

**Change Date:** 



# B/E Aerospace, Inc.

Page: 1 of 1

#### CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 650 LONGBEACH BLVD, STRATFORD, CT 06615

#### **Material Certification**

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO25584

LNE# QUANTITY U/M PART-NUMBER

50 RA NAS1329C3KB130

CUST REF#

LOT-NUMBER

MANUFACTURER

CCODE MFR DATE EXP DATE

380322

PENN ENG & MFG.

46384

Jason Lewis

Vice President of Quality

## **PACKING LIST**

ENFASCO INC.

Branch: 000

**ENFASCO** 

1675 Hylton Road

Pennsauken, NJ 08110-1313

US

Bill To:

B/E AEROSPACE INC. EMAIL INVOICES cm\_payables@beaerospace.com MIAMI, FL 331025263 US



Pick Ticket N	lumber
206758	2
Pick Date	Page
4/25/2014 11:15:06	l of l
ORDER NU	MBER
111066	7

Ship To:

B/E AEROSPACE INC. 650 LONG BEACH BOULEVARD STRATFORD, CT 06615 US

Ordered By: Mr. JOHN POESCHL

Customer ID: 103199

3059252600

PO Number		Terms D	escripti	on Net Due Date	Disc Due Date	Discount Amount	
отт	ГХ30	1% 10	Net 30				
Order Date	Pick Ticket No		Prima	ry Salesrep Name		Taker	
1/16/2014 09:55:37	2067582	HOUSE-H H				TPETRARCA	
	Quantities			Item ID		UOM	
Ordered	Shipped	Remaining	Disp.	Item Description		Unit Size	

**Delivery Instructions:** FED EX GRD 0331-0149-0, DO NOT INSURE, EACH CARTON NOT TO EXCEED

40 LBS

Carrier: FEDERAL EXPRESS GROUND

Tracking #:

2,500

Note: Claims for shortages or a material discrepancy

material. Enfasco's liability is limited to replacing the

material or refunding the invoice value of the material

must be made within 30 days after receipt of

1,171

AESS10-KB-130

ATLAS RIVET-NUT NAS1329C3-KB-130

SS10-KB-130

Ordered As: NAS1329C3-KB-130

Lot Number: 380322

Qty:

1,171 EA



EA



IA :--

CERTIFICATE OF CONFORMANCE

It is hereby certified that all articles in the above shipments are in conformance with the requirements, specifications and drawings applicable to the above contractor's purchase order. Supporting documentation is available on file for examination.

F-7.5.3.0-2 Rev 3 12/16/13

Thank You for your order.

sold.

By Fresk Berling

Enfasco, Inc.

1.0



5190 Old Easton Road Danboro, PA 18916 Tel: 215-766-5987 Fax: 215-766-5988 www.pemnet.com

April 24, 2014

Engineered Fastener Co. 1675 Hylton Road Pennsauken, NJ 08110

Reference: Certification for AESS10KB130

Lot # 380322, Test Log #14-0186

Customer Order No. D3013786, Qty: 2860

Cage Code: 46384

#### Gentlemen:

This letter shall serve as certification that the product listed above has had samples tested and accepted to the requirements of PennEngineering and NAS1329C3KB130.

The raw material that was used to manufacture these parts was melted in the USA or a qualifying country and complies with applicable sections of DFARS 252.225.

Results of dimensional inspection and performance testing have been documented in the referenced test log for the applicable lot number.

Sincerely,

Jim Fleck

**Quality Technician** 

As of 12 July, 2001, MS27130F, dated 29 January, 1985 and MS27131C, dated 01 February 1996 have been cancelled and superseded by NAS1329 and NAS 1330.

Cancelled means that the document's Preparing activity has determined that the document is no longer needed for acquisition, re procurement or design.

## LOT # 63555

PERTH, ON ERIN, ON DUMAS, AR LANCASTER, SC

813-267-3752 FAX 613-267-5617 519-833-9832 FAX 619-833-2213 870-382-2880 FAX 870-382-6988 803-283-3353 FAX 803-283-8303



FOND DU LAC, WI UNION, IL PERRIS, CA

820-926-0609 FAX 920-826-0652 815-923-2131 FAX 815-923-2126 951-667-2105 FAX 961-943-8061

THE LEADING MANUFACTURER OF STAINLESS STEEL AND NICKEL ALLOY WIRE PRODUCTS EXECUTIVE OFFICES: PERTH, ON CANADA - EMAIL: sales@controlwire.com

CENTRAL WIRE 6508 OLSON ROAD TEL: 815-923-2131

UNION, IL 60180-9730 FAX: 815-923-2126

CERTIFICATE OF CONFORMANCE

SOLD

ATLAS ENGINEERING INC. 5190 OLD EASTON ROAD DANBORO

PA 18916

ATLAS ENGINEERING INC. 5190 OLD EASTON ROAD DANBORO SHIP

PA 18916

TO

USA

TO USA

> **WORK ORDER** DATE SHIPPED

CUSTOMER'S PO NO. 937934

TYPE OF CERT Customer

CUSTOMER 103296

ORDER NO. 1181183 1

4143244

3/07/13

SPECIFICATIONS:

SS430 REV. C WITH EXCEPTION TO SECTION 4.2.1.2 (AS OUTLINED IN ROHS LETTER, FEB 2012)

	ITEM DESCRIPTION		
DESCRI	TION	SPEC. CLASS	HEAT
Cold Heading 430 SKIN PASSED Seam Free	Melt mill		C7N6
.2390 Coils Std. Copper/Techcoat	Country of origin USA	QTY SHIP	
		512	044

C MM SI P S .50 .33 .031 .0023	On i	
	CR 16.09	NI -35
MO CU N C+N AL .05 .048 .0035	CO . 02	SN .012

AS SHIPPED PROP			Miteraniea	PROPERTY.		
TENSILE 77.000 KSI						
AFTER HEAT TREA	T PROPERTIES	:		<u> </u>	L	

The material as shipped is free from mercury contamination. I certify the chemical analysis and physical and mechanical test results reported above are correct as contained in the records of the company.

Very truly yours.

FormSprint Form: #07:T\_CERT\_P2, 08/19/11

Approved by Bruce Hogie Revision Date: 2/13/2013

**CUSTOMER:** Atlas Engineering, Inc.

## **CERTIFICATE OF COMPLIANCE**

	1211 DeValer Akron, OH 4		
	•	Fx 330-633-8447	
Beringer Number:	79854		
P.O. Number:	870138		
W.O. Number:	380322		

W.O. Number:	380322						
Part Number:	AESS10KB13	n	:				
rait Number.	ALSSTORBIS	<u> </u>	······································				
Quantity:	3,300	_pcs.					
					•	AMS 2700E Me 1, Ty [[	
Specifications:	AMS 2700E				-,, <u>-,-</u> ,-	and Corrosion Test (Humidity) per	
	Mercury Free Claus	ie: No poss	SIDILITY EXISTS TO	r mercury contam	ination to o	ccur during processing or testing of parts on this o	ontrac
Coating Thickness:	Visual	inches					
Embrittlement Relief		I I m m m	-A	-		¢	
Baked:	N/A	_Hours	at	F			
nspection Level to app		rd:	6 - 3 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		ACC.	<u>X</u>	
6-3 of MILSTD105E ASTM B602 Table II: Aircraft Braking Syster	1.5%						
	de						

Certified By:

James Beringer Jr.

Date: 4/16/2014

President

SUPPLIER: Beringer Plating Inc.



# **E** PennEngineering®

# Physical Test Results

Part Number

AESS10KB130

Test Date

4/23/2014

Lot Number

380322

Test Number

14-0186

Work Order No

380322-1

Material Lot

53555

Grip Range

.080-.130

Material Type

SS430

Part ID

1 RAD

Sample	Grip	Head Diameter	Head Thickness	Thread Gage	Minor Dia.	Shank Diameter	Overall Length	Ultimate Thread Test
1	0.102	0.405	0.037	Pass	Pass	0.249	0.852	3250
2	0.102	0.408	0.037	Pass	Pass	0.249	0.850	3250
3	0.102	0.404	0.039	Pass	Pass	0.249	0.848	3250

Test Result:

Pass

Average

3250.00

hread Codes	Aluminum	Carbon Steel	430 SS	Alloy Steel	Brass	31688
4, 440	510	910	1270	1170	910	1270
6, 632	650	1330	1670	1590	1330	1670
8, 832	800	1660	1950	2570	1660	1950
0, 1024, 1032	1070	1850	3150	4130	1850	3150
25, 420, 428	1820	3500	4760	6590	3500	4760
31, 518, 524	2290	4330	6870	9040	4330	6870
37, 616, 624	3340	6840	8450	12700	6840	8450
50, 813, 820	4300	6900	10400	N/A	6900	10400

Tested by:

3231

NE STE

This test report shall not be reproduced except in full, without written approval from PennEngineering.

Form: AEF-238 Rev.G 13-Oct-2010

## MAC FASTENERS, INC. 1110 ENTERPRISE OTTAWA, KANSAS 66067

## CERTIFICATE OF CONFORMANCE AND **MANUFACTURER'S AFFIDAVIT**

CUSTOMER: B/E AEROSPACE

PO: 0KTR91

PART NUMBER: MS24694-S50

REV: 2

**LOT NUMBER: 65120** 

MANUFACTURED QUANTITY: 270,000

MILL HEAT NUMBER: 8172012

COUNTRY OF ORIGIN: UNITED STATES OF AMERICA

DFARS 252.225.7009 Compliant

#### **MERCURY FREE CERTIFICATION**

MacFasteners Inc. certifies that the parts referenced in the above lot number do not contain Mercury or Mercury compounds, and were manufactured in a Mercury free environment.

We certify that the parts furnished against the above referenced purchase order were manufactured by MAC FASTENERS, INC. within the United States, and were processed in accordance with all applicable drawings and specifications.

Objective evidence of compliance is on file, subject to examination upon request.

DATE: 08/07/13

QUALITY ASSURANCE REPRESENTATIVE

MacFasteners, Inc. is an AS9100C Regestered Company- SAI GLOBAL - 0058029

### MAC FASTENERS, INC. 1110 EAST ENTERPRISE OTTAWA, KS 66067

## **CHEMICAL & PHYSICAL TEST REPORT**

CUSTOMER	PO NUMBER MFG QUANTITY DAT		DATE	
B/E AEROSPACE	0KTR91		270,000	08/07/13
PART NUMBER	REV	LOT NO	PROCUREMENT	SPEC
MS24694-S50	2	65120	NASM7839	

MATERIAL TYPE 8740			MATERIAL SPECIFICATION MIL-S-6049/AMS6322			MILL HEAT NUMBER 8172012			SUPPLIER JOHNSTOWN				
.42	.25	Mn .87	P .008	S Cu NI Cr .013 .07 .43 .49		Mo V B .21 .003			Fe Al Ti .031				
	Со	N .0060	Bi	Pb	Mg	Zn		Nb	<b>Sn</b> .005			Other	

#### **MECHANICAL TEST RESULTS - TESTING PER NASM1312**

1	NSILE STRENGTH OUNDS
2,930	2,920
2,930	2,940
2,940	2,930
2,900	2,900
2,910	2,910
2,910	
2,920	
2,900	
MIN. REQ.	2500

DC	OUBLE SHEAR STRENGTH POUNDS / PSI
	j
	NOT REQUIRED
	TOTINEWOINED
MIN. REQ.	

HARDNESS								
ROCKWELL "C" SCALE								
REQ. 26 - 32 HRC								
SAMPLE SIZE	13							
AC	TUAL RESULTS							
	31 - 32 HRC							

	METALL	URGICAL EXAMINATION	
Discontinuities	Ø	Carb/Decarb	<b>v</b>
Grain Flow	7	Microstructure	ಶ
Grain Size	Ø	Apppearance	<b>7</b>
Thread Inspec FED-STD-H28/20 - A		System ☐ System ☑ 21 22	System   23

## TEST CERTIFICATION

WE CERTIFY THAT THE PART NUMBER, LOT NUMBER, AND SAMPLES REFERENCED ABOVE HAVE BEEN TESTED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATION

FOR THE TESTS REPORTED HEREIN. THIS CERTIFICATION SHALL NOT BE RE-PRODUCED, EXCEPT IN FULL, WITHOUT THE APPROVAL OF MAC FASTENERS, INC.

NDT/ ADDITIONAL TESTS	_
Magnetic Particle Inspection per ASTM E1444	
Liquid Penetrant inspection per ASTM E1417	
Recess Torque Test	
Head Marking	V
Magnetic Permeability ASTM A342 less than 2.0	

quality Assurance Representative

AS9100C REGISTERED SAI GLOBAL - 0058029

## MAC FASTENERS, INC. 1110 ENTERPRISE OTTAWA, KANSAS 66067

### HEAT TREAT CERTIFICATION

CUSTOMER: B/E AEROSPACE

DATE:

08/07/13

PO NUMBER:

0KTR91

MANUFACTURED QUANTITY:

270,000

PROCESSOR:

**BODYCOTE MCLEAN - NADCAP ID 4464** 

LOT NUMBER:

65120

MATERIAL:

**TYPE 8740** 

PART NUMBER:

MS24694-S50

**REVISION: 2** 

REQUIRED HARDNESS:

26 - 32 HRC

SAMPLE SIZE:

13

HARDNESS:

31 - 32 HRC

HEAT TREAT SPECIFICATION AS APPLICABLE: MIL-H-6875/AMS-H-6875/AMS2759/AMS5853/PS-1001

Notes:

The fasteners referenced in this report have been processed, inspected and certified by the Heat Treat Contractor in accordance with all applicable drawings and specifications. Heat Treatment has been verified in accordance with procurement specification and part drawing, by metallurgical and mechanical testing as applicable. Evidence of compliance as well as certification from the Heat Treat Contractor is on file and subject to examination upon request.

QUALITY ASSURANCE REPRESENTATIVE

MacFasteners, Inc. is an AS9100C Regestered Company - SAI GLOBAL - 0058029

# DE TRAY Plating Works

Specialized Electro-Plating and Polishing
Nickel Passivate
Copper Bright Dip
Decorative Chrome Strip Copper
Satin Chrome Descale
Zinc

Cadmium

10405 EAST ELEVENTH STREET • INDEPENDENCE, MISSOURI 64052 Phone (816) 252-8411 Fax (816) 252-8527 • E-mail: DeTrayPlating@Aol.com

August 5, 2013

Mac Fasteners 1110 East Enterprise Street Ottawa, Kansas 66067

Subject: Certification

This is to certify that the following parts have been cadmium plate per QQ-P-416/AMS-QQ-P-416/NAS4160/AMS2400, Type II, Class 3. Please reference our Invoice#171866 dated 8/05/2013 for:

Lot#- 65120

P.N.- MS24694S50

James T. Pierson, Vice-President

DE TRAY PLATING WORKS

Please Visit our Web Site: DeTrayPlating.com



# Johnstown Wire Technologies

124 Laurel Ave, Johnstown, PA 15906

Phone: 814-532-5680

Fax:

814-532-5684

WORK ORDER 688598

TEST REPORT

LOT NUMBER K-8172012

SALES ORDER / RLS

001324/3

SOLD TO

Mac Fasteners, Inc. C/O TD Logistics Inc. 14505 W 100th Street Lenexa, KS 66215 USA



CUSTOMER P.O. <b>50516</b>		JSTOMER	PART			QUAN <b>19,648</b>	LBS		LADING N 0011718				ENT DAT /2013
SPECIFICATION AMS2301; AMS Supplement S Spherodize An Size: ,1865+.0	6322; A Silicon K nealed I	MS-S-60 illed Fine	Grain	Aircra	ft Qualit	y/Cold He	ading	ense Fee Quality	deral Acc	quisition From A	Reguia	ation d Rod	<u> </u>
CERTIFICATION R	EQUIREM	ENTS											
					CI	nemical							
C .42	Mn . 87	P .008	.01	S L3	si .25	A1 .031	. 4	i. 3	Cr .49	Mo ~~	. O		.003
Cb .001 ???	T1 ?????	N .0060	. 00	3n 05			·				· · · · · · · · · · · · · · · · · · ·		
					P	hysical							
AMS 2301 0000	J1 57	J10 37	J11 35	J12 34	J2 56	J3 55	J5 53	Ј <b>4</b> 55	ፓ6 50	J7 46	<b>J8</b> 42	<b>Ј</b> 9	
MacroClean 111	E-381												
					Me	chanical				•			
TEST Tensile Str RA Per Cent Decarb FFD Surface def. de	epth		UNITS Lbs/So Percer Inches Inches	nt ;	-		{	HIGH 84000 76.9 .000		LOW 80000 70.3 .000			82000 73.4 .000 .001
					Rod /	Melt Sour	ce			<u> </u>		. <u> </u>	
Rod Source Republic			t Sou	rce		Country USA	of C	rigin	Naf Yes	ta			
					End of	Certification							

I certify that the results are a true and correct copy of the records prepared and maintained by JOHNSTOWN WIRE TECHNOLOGIES in compliance with the requirements of the cited specification. Chemistry is as reported by the rod / bar supplier and is not in JWT A2LA accreditation. This test report cannot be reproduced or distributed except in full without the written permission of JOHNSTOWN WIRE TECHNOLOGIES. The test results certified herein relate only to the Items tested.

Daniel Hallet Director of Quality Assurance

CERTIFICATE OF TESTS

1801 SALT TRUM FF. 2HOVE: 390-438-5580 EQUATER, OH 44055 FRE 390-138-5695

REPUBLIC STEEL

2/27/2013 2:38:00 PM PAGE 1 OF 2 

PURCHASE ORD: 83625

HEAT:

PART NUMBER: FXT40AA-.3125 ORDER NUMBER: 1539858 - 01 8172012

PURCHASE ORDER DATE: ACCOUNT NUMBER:

12/21/2012 5672-1920-01

0354-93

SCHEDULE:

REVISION:

1

JOHNSTOWN WIRE TECHNOLOGIES

124 JAUREL AVE JOHNSTOWN, PA 15906 JOHNSTOWN WIRK TECHNOLOGIES EDWARD ZAPOLA 124 LAUREL AVE

TRUCK STPO 9 ROD DOCK JOHNSTONN, PA 15904

MATERIAL DESCRIPTION -----

HOT ROLLED STEEL COILS ALLOY AMS 2301K JOHNSTOWN WIRE SPEC RW-100 REVISION DTD 04/21/04 BXC PARA 10.3 AMS 6322N EXC HARD JOHNSTOWN WIRE SPEC RW-005 REVISION DTD 12/31/00 EXC SURFACE DEFECTS JOHNSTOWN WIRE SPEC PART NO. FXT40AA REVISION DYD 12/31/00 MIL, S 6049A & AND 1 COND B-1 EXC MARK & UT WAIVED EF-AISI-8740-K FINE GRAIN VACUUM DEGASSED AIRCRAFT QUALITY FIXED PRACTICE QUALITY RESTRICTED CHEMISTRY RESTRICTED MAX INCIDENTAL ELEMENTS

SIZE: RDS .3125 DIAM X COIL RDS 7.9375MM DIAM X COIL

LADIR CHEMISTRY \* ..... \_\_\_\_\_. CR CU NΥ P S SI C MEN 0.49 0.07 0.43 0.25 0.42 0.87 0.008 0.013 CR N Я MO SN AL v 0.0060 0.005 0.031 0.0000 0.001 0.21 0.003 CALCULATED TESTS -----

REDUCTION RATIO 1,690.4 TO 1

AUSTENITIC GRAIN SIZE 5 OR FINER BASED ON A TOTAL ALUMINUM CONTENT EQUAL TO OR GREATER THAN .020% PER ASTM A29.

SEMI - FINISHED RESULTS -----

JOMINY HARDNESS TEST SAE J406/ASTM A255

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 18 20 22 24 26 28 30 32 57 56 55 55 53 50 46 42 39 37 35 34 33 32 31 31 30 29 29 28 27 28 27 27

MACRO ETCH TEST

AS'IM E381/MIL STD 430

ETCHANT: HCL TEMPERATURE: 170

C R S

1 DVA 1

MAGNETIC PARTICLE TEST AMS 2301 AMS2304 AMS2300

IND AVG IND AVG FREQ SBV SEV PREO 0 O 0 0

FINISHED SIZE RESULTS

DECARBURIZATION TEST SAE J419/ASTM EI077/JIS G0558 MAGNIFICATION = 100X

E'rCHANT = NITAL

TOTAL SPIKE COMPLETE

DEPTH INCHES INCHES

PCE 2394 G. KRUTH INCHES 0.002 0

0.002

DIRECTOR QUALITY ASSURANCE

BY DEBORAH STOKES

T Kin



1807 BAST 28TH FF. SHOKE: 330-498-85EG

14055 LONAIN, CH FAS : 390-498-5695

REPUBLIC STEEL

2/27/2013 2:38:00 PM PAGE 2 OF 2

PURCHASE ORD: 83625

PART NUMBER: FXT40AA-.3125 ORDER NUMBER: 1539850 - 01

HEAT:

B172012

PURCHASE ORDER DATE:

ACCOUNT NUMBER:

SCHEDULE:

REVISION:

12/21/2012 5672-1920-01

0354-93

1

CAPABLE OF SEAM DEPTH 1% MAX DIAMETER NOT LESS THAN .005 MAX

NOTES -----CHEMICAL ANALYSIS CONFORMS TO APPLICABLE SPECS: ASTM E415, LBL10129, LBL10130, ASTM E1019,

LBL10158, LBL10114, AND ASTM E1085, LBL10184, LBL10188.

REPUBLIC STEEL HEREBY CERTIFIES THAT THE MATERIAL LISTED HEREIN HAS BEEN INSPECTED AND TESTED IN

NOTES (CONTINUED)

ACCORDANCE WITH THE METHODS PRESCRIBED IN THE GOVERNING SPECIFICATIONS AND BASED UPON THE RESULTS OF SUCH INSPECTION AND TESTING HAS BEEN APPROVED FOR CONFORMANCE TO THE SPECIFICATIONS.

CERTIFICATE OF TESTS SHALL NOT BE REPRODUCED EXCEPT IN FULL.

ALL TESTING HAS BEEN PERFORMED USING THE CURRENT REVISION OF THE TESTING SPECIFICATIONS.

RECORDING OF FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHED AS A FELONY UNDER FED STATUTES TITLE 16 CHAPTER 47.

THE MATERIAL WAS NOT EXPOSED TO MERCURY OR ANY METAL ALLOY THAT IS LIQUID AT AMBIENT TEMPERATURE DURING PROCESSING OR WHILE IN OUR POSSESSION.

NO WELD OR WELD REPAIR WAS PERFORMED ON THIS MATERIAL.

THE RESULTS REPORTED RELATE ONLY TO THE ITEMS TESTED.

----- SOURCE INFORMATION -----

MELT SOURCE: CANTON CAST ROLL MELT COUNTRY: U.S.A HOT ROLL SOURCE: LORAIN 9/10, U.S.A

MRET METHOD: EF BLOOM RED. RATIO: 1690.4

----- END OF DATA ----- CC ------ END OF DATA -----WITH SHIPMENT 1 COPY PRINTED AT SHIPPING AREA

FAX SHIP TO 1 COPY ATTENTION EDWARD ZAPOLA 1 COPY FILE

1-814-532-5684

G. KRUTH DIRECTOR QUALITY ASSURANCE BY DEBORAH STOKES

MT Kit



# B/E Aerospace, Inc.

Page: 1 of 1

**CONSUMABLES MANAGEMENT** 

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172

4. 1

#### **Material Certification**

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO25584

LNE# QUANTITY U/M PART-NUMBER

200 BA MS24694S50

CUST REF#

LOT-NUMBER

65120

MANUFACTURER

CCODE MFR DATE EXP DATE

MAC FASTENERS

ORFT4

Jason Lewis

Vice President of Quality



# B/E Aerospace, Inc.

Page: 1 of 1

#### CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191 Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172

1.11

#### **Material Certification**

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO25584

LNE# QUANTITY U/M PART-NUMBER

100 EA MS21075L3

CUST REF#

LOT-NUMBER

MANUFACTURER

CCODE MFR DATE EXP DATE

56736

ALCOA FASTENING/REPU 52828

Jason Lewis

Vice President of Quality

### Alcoa **Fastening Systems**



Aerospace Products Republic Operations

QUALITY OPERATING FORM

Document:

F-10.700.6

Revision:

June 26, 2014

Date: DCN:

2370

## **CERTIFICATE OF TEST**

WE HEREBY CERTIFY THAT ALL MATERIALS USED IN THE MANUFACTURE OF PARTS COVERED BY THE REPORT CONFORM TO THE MATERIAL SPECIFICATIONS CALLED FOR BY THE PURCHASE ORDER. WE FURTHER CERTIFY THAT THE PARTS ARE MANUFACTURED IN ACCORDANCE WITH APPLICABLE DRAWINGS OR SPECIFICATIONS CURRENT ON THE DATE OF MANUFACTURE. TEST REPORTS COVERING MATERIALS IN THESE PARTS AND INDICATING CONFORMANCE WITH APPLICABLE SPECIFICATIONS ARE ON FILE AND SUBJECT TO EXAMINATION.

PARTS AS SHIPPED	DHAVE NEVER BEEN IN CONTACT WITH EPT IN FULL, WITHOUT WRITTEN APPR	MERCURY. THIS OVAL OF THE LA	ABORATORY.	L NOI BE	
	CTURED IN: U.S.A. MEXICO				
AFS IS IN COMPL	IANCE WITH DFAR 252.225.7009				
Kara him	2 Martines		7.2	9.14	
Signature of Qual	ity Assurance Representative		ate		
P.O. No:	0NAP24	Item No:	MS21075L3N	I REV.2	
Quantity Ordered:	113,850	Date Cert Ordered:	7-29-14		
Customer:	B/E AEROSPACE CONSUMABLES	ID No.:	56736		
Description:	ASSEMBLY	Procurement Spec.:	NASM25027		
Also Certified To:	MS21075L3 NAS1068A3,NAS1068RA3 REV.13	Additional Info:	RFM20A3		k,
Date of Manufacture:	4-07-14		These articles are 1304 & CFR part 1 containers must be legibly, indelibly & containers will permit	ubsequent Purchaser or F imported. The requirement 34 provide that the article marked in a conspicuou permanently as the natur it, in such a manner as to	nts of 19 U.S.C. is or their s place as e of the article or indicate to an
		(	ultimate purchaser the country of origi	in the United States, the n of the article.	English name of
•	IF APPLICABLE, CH	IECK ON BELO	W:		
HERE-IN WERE PR QUALITY CONTROL  K. PARAGRAPH 21.	CATION (PMA): IT IS HEREBY CERTIFIED ODUCED UNDER FEDERAL AVIATION AD L SYSTEMS/METHODS AS SET FORTH IN .303 AND (B) ALL PARTS AND/OR MATER AIR WORTHY CONDITION.	OMINISTRATION A I FEDERAL AVIAT	APPROVED MAN TION REGULATI	NUFACTURING AND ON, PART 21, SUB-I	) PART
Signature of Qua	lity Assurance Representative	Ī	Date		
INSPECTED IN ACC THIS ARTICLE ARE ARE NOT NECESS. FASTENERS OF SI	ATEMENT: THE PARTS CONTAINED IN TO CORDANCE WITH TSO-C148. THE CONDITION OF PARTS ON THE CONDITION OF PARTS MAY PROPERTIES. SUBSTITUTION OF PARTS RATOR.	TIONS AND TEST AIRCRAFT FAST AIRCRAFT FAST HAVE WIDELY V	TS REQUIRED F TENERS APPRO TENERS APPRO ARYING PERFO	OR TSO APPROVAL OVED UNDER THIS T VED UNDER THIS T ORMANCE AND	TSO TSO.
Signature of Qua	- MontineS lity Assurance Representative	[	7-29 Date	1-14	· · · ·
		4			•

## Alcoa Fastening Systems



Aerospace Products · Republic Operations

QUALITY OPERATING FORM

Document:

F-10.700.4

Revision:

Date:

December 9, 2011

DCN: 1795

# FINAL (PROCESSING, LAB, MECHANICAL TESTING) INSPECTION REPORT

Lot Number	r;	Part Number:	Dwg. Nun	nber:		Dwg. Rev#:	Lot Quantity:	Date:
5673	36	RFM20A3	IVAS	M21	1075	2	113,850	7-22-14
Procuremen	nt Spec.:	M 25027	Proc. Spe	c. Rev#:	Note: All Specifica Revision Ur	itions Referenties Otherwis	ced Refer To The I	
SAMPLE	Drawning was from the Committee of the	HARACTERISTIC DESCRI	PTION -	- 1	NSPECTION MEDIA	ACCE	PTANCE STAMP	PRODUCTION 5
SIZE!	Material: Heat: Size:	CALSTRIP 32690 .032 x .750		Vendor ( Alloy Ve	Certification rification		(RFM) 208-1	4-7-14
CAP	Material: Heat: Size:			Vendor ( Alloy Ve	Certification rification		NA	
BASKET	Material: Heat: Size:	CALSTRIP ULPRO931 .025 x .812		Vendor ( Alloy Ve	Dertification rification	(RF1 208-	M)	4-7-14
CLIP	Material: Heat: Size:			Alloy Ve	Certification rification		NA	
	AMS275 Aged Lo	•	ss Steel Only	Tensile HRC Ha	rdness Tester		NA	
15	AMS-H-6	5875 pering Load: <u>7 - 2 4 -</u>	Steel Only	Tensile HRC Ha	rdness Tester		(RFM) 207-1	7-24-14
	AMS241	0[] AMS2411[]		Visual A ASTM B	dhesion And Thicknes 568	S	NA	
80	AMS-QC	0-P-416 Class 1 [ ] 2 📈 3 [	1	Visual A ASTM B	dhesion And Thicknes 568	S	(RFM) 207-1	7-28-14
	AMS240	0		Visual A ASTM B	dhesion And Thicknes 568	s	NA	
10	Embrittle	ment Relief		Hours S	8-50 [ ] Clip tress At Room Temp F 312, Test 14	'er	(RFM) 207-1	7-28-14
	Embrittle	ement Relief			ours Stress At Service er NASM1312, Test 14 70 [ ]		NIA	
80	Gold Chr	romate Treatment Type II			Vorkmanship ay Test of AMS-QQ-P-	416	RFM 207-1	7-28-14
	Passivat	Stainle ed Per AMS-QQ-P-35, AM	ss Steel Only S2700	Visual H NASM13	igh Humidity Test Per 312		NA	
		Permeability <2:0 (Air 1.0 = 200 Oersteds	) For A Field		Per ASTM A342 Meth sion Resistant Steel O		NA	
80	Non-Des Sample [	structive Testing Discontinu	ities	E1444 o	c Particle Per ASTM r Fluorescent Penetrar M E1417	nt	RFM 207-1	7-2-14
32 PCS	Carbowa Batch No	x Per C-1315 Drawing		, ,	Vorkmanship		NA	
27	Dry Film Batch No	Lubricant Per AS5272 Typ : OCI4738	e 1	Per AS5	Vorkmanship, Adhesio 272 eriodic Salt Spray	n .	(RFM)	7-28-14
	Microstru	ucture		BPS-N-7 NAS335			NA	
32	Threads	Per MIL-S-8879, AS8879		Method	B, System 22		(RFM) 208-1	6-30-14

## CERTIFIED TEST REPORT



# Calstrip Steel Corporation

7140 Bandini Blvd. \* Los Angeles, CA 90040-3388 (323)726-1345 \* Fax (323)722-8269

Customer:

ALCOA FASTENING SYSTEMS REPUBLIC

Address:

REPUBLIC FASTENER

1300 RANCHO CONEJO BLVD.

NEWBURY PARK, CA 91320

Part ID:

R620-032-750-CS

Description:

HC,CR.1050,032X750 XCOIL

Drawing #:

R620-032-750-CS

Rev#:

08/20/08

Order Number:

S94796 / W123270

Customer PO:

220726654 \* 05/20/2014

Shipped Date: Packlist ID:

165977

Material Spec:

AMS-5085H, AMS QQS-700B, QQS-635,

ASTM A682-05, ASTM A684-12

HeatID:

132690 -

## **CHEMICAL ANALYSIS**

C	Mn	P	S	Si	Ni	Cr	Cu	Mo	Resi
0.5300	0.6200	0.0100	0.0010	0.2420	0.0450	0.0860	0.1140	0,0140	
W	<b>V</b>	Sn	Ti	Al	Ca	Zr	Co	N	В
	0.0010		0.0040	0.0280				0.0100	0.0005

#### **MECHANICAL AND PHYSICAL PROPERTIES**

Yield	Tensile	Elong %	Hardness	Bend Test	Skid Numbers	# of Coils	Weight
	70110110	Living /4	TIME GALCOS	Denu Test	W123270-1	8	959
			HRB 78	OK.	W123270-2	8	946
			<u> </u>		W123270-3	8	946
<u> </u>			T	1	W123270-4	. 8	937
Grain Size	Olsen Test	Spher%	Decarb	Reduct %	W123270-5	. 8	988
		100		American Company of the Company of t	W123270-6	8	979
8		100	0			48	5,755

SOURCE-NUCOR (USA) Comment:

All work on this order has been performed in accordance with the Company's Quality Assurance Manual.

UTechnical Services

Form #:

Print Date:

5/20/2014

Page: 2

## **CERTIFIED TEST REPORT**



# Calstrip Steel Corporation

7140 Bandini Blvd. \* Los Angeles, CA 90040-3388 (323)726-1345 \* Fax (323)722-8269

BASKET

Customer:

ALCOA FASTENING SYSTEMS REPUBLIC

Address:

REPUBLIC FASTENER

1300 RANCHO CONEJO BLVD. NEWBURY PARK, CA 91320

Order Number:

S94796 / W123269

Customer PO: Shipped Date:

220726654 06/04/2014

Packlist ID:

167068

Part ID:

R620-025-812-CS

Description: HC.CR.1050.025X.812XCOIL

Drawing #:

R620-025-812

Rev#:

Material Spec:

AMS-5085H, AMS QQS-700B, QQS-635,

ASTM A682-05, ASTM A684-12

HeatID:

NLPR0931 /

## **CHEMICAL ANALYSIS**

C	Mn	P	S	Si	Ni	Cr	Cu	Mo	Resi
0.5100	0.6500	0.0060	0.0030	0.1790	0.0700	0.0400	0,1500	0.0200	
W	V	Sn	Ti	Al	Ca	Zr	Со	N	В
	0.0010	0.0200	0.0010	0.0360	0.0017			0.0080	

## MECHANICAL AND PHYSICAL PROPERTIES

Yield	Tensile	Elong %	Hardness	Bend Test
			HRB 72	OK
· · · · · · · · · · · · · · · · · · ·				

W123269-2 10 1,7	W123269-3	27	1,736 4,988
		10	1,794
1771100000 d	W123269-1	8	1,458

# of Coils

Weight

Grain Size	Olsen Test	Spher%	Decarb	Reduct %
8		100	0	

Comment:

SOURCE- NLMK (USA)

Skid Numbers

٨V

All work on this order has been performed in accordance with the Company's Quality Assurance Manual.

MARIO VÁRGAS

UTechnical Services

Form #:

Print Date:

6/4/2014

Page: 2



# B/E Aerospace, Inc.

Page: 1 of 1

**CONSUMABLES MANAGEMENT** 

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Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172

#### **Material Certification**

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FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO25584

LNE# QUANTITY U/M PART-NUMBER

50 EA MS35207-262

CUST REF#

LOT-NUMBER

MANUFACTURER

CCODE MFR DATE EXP DATE

09/03/14

R34854

PILGRIM SCREW (RI) 47253

Jason Lewis

Vice President of Quality

## PILGRIM

Screw Corporation

#### PACKING LIST

ARIZONA - 480-917-2500

SHIPPED FROM 259 DEXTER STREET and 120 SPRAGUE STREET PROVIDENCE, RI 02907

RHODE ISLAND - 401-274-4090

6/19/2014

BE

**BILL TO: B/E AEROSPACE** 

CONSUMABLES MANAGEMENT

MIAMI FL 33102-5263 P.O. BOX 025263

SHIP TO: B/E AEROSPACE

CONSUMABLES MANAGEMENT

**9835 NW 14TH STREET** MIAMI, FL 33172

**OUR ORDER#** 

ORD118013

**TERMS** 

Net 30\*DNI\*033101490

FREIGHT SHIP VIA

FedEx Ground

SHIPPING DATE

6/19/2014

**CUSTOMER PO#:** 

0XPM87

U/M

PART#

**DRAWING#** 

EA

NASM35207

Revision:

10-32 X 7/16 PH PAN STL/Cd2

OR SOONER

RELEASE # RB5H0XPM87

LOT#:

R34854 QTY: 250,000.00

pc#202 32 CTNS, TOTAL WT. 1344.00 LBS WITH 0 ON BACKORDER

MFR C OF C CHEM AND PHYS

RAW MATERIAL AND PROCESS CERTS

QUALITY CLAUSES: A, B, C, E, H, P, U, V APPLY

PILGRIM LATEST REV: PLEASE NOTIFY OF ANY NEWER REV

REQUESTS

SHIPPING INSTRUCTIONS:

\*\*NO OVERSHIPMENTS\*\*

IF UNDER 150 LBS SHIP FEDEX GROUND ACCT# 0331-0149-0 MARK:

COLLECT

IF OVER 150 LBS, SHIP FEDEX FREIGHT ECONOMY ACCT 018757

#### CERTIFICATE OF COMPLIANCE

We hereby certify that all items delivered on this invoice comply with all applicable drawing, specification, and purchase order requirements. Evidence of such is on file for review for a minimum of 10 years. All products manufactured by Pilgrim Screw are of domestic origin and have not come in contact with mercury while in our possession. Also all special processes were performed by approved sources at the time of manufacture. Shortage claims must be made within (5) days after receipt of the goods. Quality claims must be made within (30) days after receipt of the goods. Returns will not be accepted without a 'Return Material Authorization' number. All goods returned must have the freight prepaid.

MADE IN THE USA

Page# - 1

# PILGRIM

Screw Corporation

#### PACKING LIST

ARIZONA - 480-917-2500

SHIPPED FROM 259 DEXTER STREET and 120 SPRAGUE STREET PROVIDENCE, RI 02907 RHODE ISLAND - 401-274-4090

6/19/2014

PAC140213

BE

BILL TO: B/E AEROSPACE

CONSUMABLES MANAGEMENT

MIAMI FL 33102-5263 P.O. BOX 025263 SHIP TO: B/E AEROSPACE

CONSUMABLES MANAGEMENT

9835 NW 14TH STREET MIAMI, FL 33172

FedEx Ground

OUR ORDER # ORD118013 TERMS

Net 30\*DNI\*033101490

FREIGHT SHIP VIA

**SHIPPING DATE** 

6/19/2014

**CUSTOMER PO#:** 

0XPM87

**OTY** 

U/M

PART#

DRAWING#

C

\*\*\*DO NOT INSURE OR DECLARE A VALUE FOR THIS SHIPMENT\*\*\*

Schedule B#: (7318159000) ECCN #: 9A991d "NLR"

SHIPPING INSTRUCTIONS: LABEL ON OUTSIDE OF BOX

HONEYWELL SOURCE ACCEPTED:

STAMP IMPRESSION

DATE:

16 334

6/19/2014

\*\*\*\*BOXES MUST NOT EXCEED 40 LBS EACH\*\*\*\*

CERTIFICATE OF COMPLIANCE

We hereby certify that all items delivered on this invoice comply with all applicable drawing, specification, and purchase order requirements. Evidence of such is on file for review for a minimum of 10 years. All products manufactured by Pilgrim Screw are of domestic origin and have not come in contact with mercury while in our possession. Also all special processes were performed by approved sources at the time of manufacture. Shortage claims must be made within (5) days after receipt of the goods. Quality claims must be made within (30) days after receipt of the goods. Returns will not be accepted without a 'Return Material Authorization' number. All goods returned must have the freight prepaid.

MADE IN THE USA

Authorized Rep.

Page# 2





## CHEMICAL AND PHYSICAL CERTIFICATE



#### SOLD TO

B/E AEROSPACE CONSUMABLES MANAGEMENT MIAMI FL 33172

#### MADE IN THE USA

CAGE CODE: 47253

DOCUMENT # PSQR0001 REV 4

#### **MANUFACTURED BY**

PILGRIM SCREW CORPORATION 120 SPRAGUE STREET PROVIDENCE RI 02907 USA

FAX. 401-861-9890 TEL, 401-274-4090

**CUSTOMER PO #/ CONTRACT #** 0XPM87

LOT # / JOB #

R34854

**RAW MATERIAL HEAT #** 2JX74

PACKING LIST # PAC140213

**MANUFACTURE DATE** 6/18/2014

MATERIAL GRADE UNS G10180

**PURCHASE QTY** 250.000

**CERTIFICATION DATE** 6/20/2014

**RAW MATERIAL SOURCE** INDUSTRIAL STEEL/CHUN YU

SPECIFICATION/PART# - DRAWING # - REVISION

MS35207-262

NASM35207

NOMENCLATURE/ITEM DESCRIPTION 10-32UNF-2A X 7/16 PH PAN HD MACH SCREW

PROCUREMENT SPECIFICATION

FF-S-92B(1)

THREAD SPECIFICATION

FED-STD-H28/2B/20B(22)

**MATERIAL SPECIFICATION** 

ASTM A108

**HEAT TREAT SPECIFICATION** 

N/A

**FINISH SPECIFICATION** AMS-QQ-P-416C CLASS 3 TYPE 2

NOTES

QA TEST SUMMARY

OTHER TESTS

**UTLIMATE TENSILE LBS / P.S.I.** 

MAGNETIC PERMEABILITY

1464/73222

N/A

YIELD LBS / P.S.I.

N/A

**HARDNESS** N/A

SHEAR LBS / P.S.I.

**TORQUE IN / LBS** 

N/A

Test data will be on file for a least 10 years from the date of manufacture, or as agreed upon in the contract. This lot has been produced, sampled, tested, inspected, and marked in accordance with all contact and specification requirements, and the material complies with all the contract and specification requirements. The product specified heron was not in contact with Mercury while in our possession. Class 1 ozone-depleting substances of the clean air amendment of 1990 were not used in the design, manufacture, or test of the item

Electronically counted quantity is within +/- 1% Specified.



## 1901 N. Narragansett Ave. • Chicago, Illinois 60639 773/804.0404 • Fax 773/804.0408

#### www.industeel.com

An ISO 9001 Certified Company

04/21/14

ISW Order/Invoice Number: 185470-00

SOLD TO: P6100

PILGRIM SCREW CORPORATION

120 SPRAGUE ST

SHIP TO: P6101

PILGRIM SCREW CORPORATION

259 DEXTER ST

PROVIDENCE

RI -02907 PROVIDENCE

RI 02907

PILGRIM SCREW QC BY

CUSTOMER PO: 68822

1710GIPC

.1710 "C1018 COLD HEADING AKFGSAIP COILS

WEIGHT:

3278

HEAT NUMBER: 2JX74

CHEMISTRIES

C Mn .180 .770

P .017

S .007

Si .050

Al .045

#### PHYSICAL PROPERTIES

TENSILE: 61000.

61000.

TORSIONS:

BENDS:

ROCKWELL #1:

ROCKWELL #2:

YIELD STRENGTH:

ELONGATION:

REDUCTION OF AREA: 79.0/79.0

\*\*\*\* MERCURY FREE \*\*\*

SALT SPRAY HOURS:

COATING WEIGHT: GRAIN SIZE:

TARIFF: 7217.10

NAFTA:

IFI 140

ASTM F2282-03

ASTM A108 CHEM ONLY

\*\*\* SPECIFICATIONS \*\*\*

TAIWAN MELT: TW

ORIG: TW TAIWAN

MILL: NORTHBAY ENTERPRISES

DFAR: N ROHS: Y

Quality Control/Manager

The values and specifications herein are passed through from the manutacturer directly to the customer. Please see reverse side or www.industeel.com for all Terms and Conditions of Sale. Material Properties Sheet 70403-MPS Version 1 Approved by BF 11/20/12

WORKS CO. LTO

# CHUN YU WORKS & CO., LTD.

HEAD OFFICE:
1, CHIASHING, KANGSHAN, KAOHSIUNG, 82057 TAIWAN
TEL: 886-7-621-4121 FAX: 886-7-622-3236

SALES DEPT:
100, TA-PAO ST. KANGSHAN, KAOHSTUNG, 82063 TAIWAN<sup>®</sup>
TEL:886-7-622-4111 FAX: 886-7-623-6721













Longing within the AZLA Scope of Association

CY-G4-01-16-04

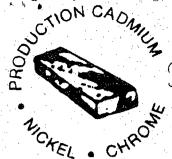
## TEST CERTIFICATE

			,		CY &		P		RI	PORI	NO:	ISW201	14090
P.O. NUMBE	<del></del>		05750	<del></del>	1 (22)	C WIII	· Y	OICE I	 NO:	IS	W-2014		
			-25155						SSUE:		12/09/2		<del></del>
S/C.NUMBI		-+	-1018	<del></del>	110	· · · · · · · · · · · · · · · · · · ·			Q'ΓY:		וכומנו	<del></del>	
MATERIAI.			<del></del>		<u> </u>						30 1 138		
BUNDLE W			1637	THE		<del></del> -	1017	M. WI	gchti:	03.			<del></del>
CHEMICAL			%			,		,		7 34-	ĪV	В	Al
HEAT NO.	BUNDLE NO	C. X100	Mn X100	P X1000	X1000	S1 X100	X100	Ni XJ00	(T X100	Mo X100	X1000	00001X	
2JX74	6-7	18	77	17	7	. ,5	***	***	***	***	***	***	15
3NG78	1-2	18	82	19	9	5	***	***	***	***	***	***	37
PHYSICAL PROPERTIE	6"	MAK			TEN <b>S</b> JI	E <b>S</b> TI KSI	RENG	TH	REDUC AF	CTION EA %			
SPECFICATI		0.171	+0.001 -0.000			68	MΛ	ιx		62	MIN		
TEST RESU	LT												·
BUNDLE	1 07	IMAIC IN		7	ENSII I	e ste Ksi	RENGT	TH :	REDUC AR	CTION LEA %		HEAT	NO.
6-7		0.171-	0.171			61-61			7	9-79		2JX	74
1-2		0.171-	0.171			60-60	1	1.	7	9-79		3NG	78

Q.A MANAGER:

5. 7. 141 Nota

WE HEREBY CERTIFY THAT MATERIAL DESCRIBED HEREIN HAS BEEN MANUFACTURED AND TESTED WITH SAUSFACTORY RESULTS IN ACCORDANCE WITH REQUIREMENT OF THE ABOVE MATERIAL SPECIFICATION.



# New Method Plating Co., Inc.

43 Hammond St. Worcester, MA 01610 Phone 508.754.2671 Fax 508.754.1981

Ouality
Management
System
ISO 9001:2000
AS9100 REV.C

Established 1931



## CERTIFICATE OF COMPLIANCE

OMPANY PILGRIM SCREY	W CORP.	<b>DATE</b> <u>6/16/14</u>
PO#	LOT#	QUANTITY
69939	R34854	303,845
CADMIUM PLATED I Class <u>III</u> , Type	N ACCORDANCE W II (Clear_Yellov	
Hardn	ess: <u>NA</u> HRC	
X ] NO BAKE		
Before plating, bake at 375+/-25	F for 4 hours. After plating	g, bake at 375+/-25F for 3 hours.
		g, bake at 275+/-25F for 23 hours.
Before plating, bake at 375+/-25	F for 4 hours. After plating	g, bake at 3/5+/-25F for 25 hours.
<u>T</u>	hickness Test Results	
Accept [X] Reject [	] Min.: Spec. <u>.0002</u>	Read .00036 Avg .00040
Accept [X] Reject []	Inspected by	$\sim$ $\leftarrow$
	Certification	
nis lot has been processed, sampled, te quirements listed above, and the platin ecification requirements. Process cont	ng and conversion coating coording coording coording coording to and is available and is available and is available.	omplies with those contract and
rts have been processed in a mercury f	free environment.	
	4.5	
_		JUN 16